a quality meter for communicating a determined transmission quality of said transmission channel;

said controller setting said transmission power for a transmission of digital information dependent on a difference between a metered transmission quality determined by said quality meter and a required transmission quality that is required for a transmission data rate employed for said transmission of said digital information with a specific, maximally allowed error rate.

2. (Amended) The apparatus according to claim 1, further comprising a definition mechanism for defining a maximum transmission data rate of said transmission channel depending on said determined transmission quality.

3. (Amended) The apparatus according to claim 1, further comprising a connection with which a definition mechanism for determining a maximum transmission data rate is supplied with a predetermined, maximally allowed error rate.

4. (Amended) The apparatus according to claim 2, further comprising a selector for selecting a transmission data rate dependent on a maximum transmission data rate determined by said definition mechanism and dependent on a specific, requested transmission data rate.

5. (Amended) The apparatus according to claim 1, further comprising :

a transmitter for said transmission of digital information via said transmission channel,

said transmitter comprising:

a digital channel encoding device for encoding said digital information;

a bit/symbol converter for presentation of said digital information in a form of symbols; and

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a modulator for mapping said symbols onto signal values for transmission via said transmission channel;

said apparatus further comprising:

a receiver, comprising:

a demodulator for converting received signal values into detected symbols;

a symbol/bit converter for converting said detected symbols as a received symbol stream into an encoded bit stream; and

a decoder for presentation of said detected symbols as detected digital information.

6. (Amended) A method for setting a transmission power for a transmission of digital information via a transmission channel, comprising the steps of:

measuring an identified transmission quality;

determining a difference between said identified transmission quality and a required transmission quality that is required for a defined transmission data rate employed for said transmission of digital information with a specific, maximally allowed error rate; and

boosting or lowering said transmission power for said transmission of digital information depending on said difference.

7. (Amended) The method according to claim 6, further comprising the step of defining a maximum transmission data rate of said transmission channel dependent on said identified transmission quality and on a modulation method employed.

8. (Amended) The method according to claim 7, further comprising the step of defining said maximum transmission data rate dependent on a specific, maximally allowed error rate.

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9. (Amended) The method according to claim 6, further comprising the step of transmitting said digital information which comprises the steps of:

presenting said digital information in a form of symbols;

mapping said symbols onto signal values;

transmitting said signal values via said transmission channel;

receiving said transmitted signal values;

detecting said received signal values;

mapping said detected signal values onto detected symbols; and

converting said detected symbols into a detected digital information.

10. (Amended) The method according to claim 6, further comprising the steps of:

defining a signal-to-noise ratio based on signal values received at a receiver side as a criterion for said transmission quality;

determining said transmission quality of said transmission channel; and

defining a maximum transmission data rate of said transmission channel depending on said identified transmission quality and on said modulation method employed.

11. (Amended) The method according to claim 10, further comprising the step of defining said maximum transmission data rate depending on said specific, maximally allowable error rate.

12. (Amended) The method according to claim 10, further comprising the step of selecting a transmission data rate, a mapping algorithm, and a corresponding encoding method depending on said maximum transmission data rate of the transmission channel determined by a definition mechanism and depending on a requested transmission data rate and a maximally acceptable error rate.

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13. (Amended) The method according to claim 10, further comprising the steps of:

determining a transmission quality for different respective modulation methods;

defining a maximally possible data rate of said transmission channel for each modulation method; and

selecting a modulation method to be employed depending on said maximally possible data rate determined for each modulation method.

14. (Amended) The method according to claim 10, further comprising the step of:

boosting or lowering a transmission power for said transmission of digital information via said transmission channel depending on a difference between said identified transmission quality and said required transmission quality that is required for a defined transmission data rate employed for the transmission of the digital information with a specific, maximally allowed error rate.

15. (Amended) The method according to claim 10, further comprising the step of transmitting said digital information which comprises the steps of:

presenting said digital information in the form of symbols;

mapping said symbols onto signal values;

transmitting said signal values via said transmission channel;

receiving said transmitted signal values;

detecting said received signal values;

mapping said detected signal values onto detected symbols; and

converting said detected symbols into a detected digital information.

16. (Amended) The method according to claim 10, further comprising the step of defining said signal-to-noise ratio as a criterion for said transmission quality.

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17. (Amended) A method for adapting a transmission power for a transmission of digital information via a transmission channel to the transmission quality of the transmission channel, comprising the steps of:

determining an identified signal-to-noise ratio of said transmission channel;

boosting or lowering said transmission power depending on a difference between said identified signal-to-noise ratio of said transmission channel and a signal-to-noise ratio of a transmission data rate used for said transmission of the digital information.

Please add the following claim 18.

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18 (New) The apparatus according to claim 3, further comprising a selector for selecting a transmission data rate dependent on a maximum transmission data rate determined by said definition mechanism and dependent on a specific, requested transmission data rate.